Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for propagating vibration into a conductive fluid, comprising the steps of:

preparing a given conductive fluid,

and

applying a given magnetic field and a given wave to said conductive fluid so as to satisfy the relations of:

$l_{\perp} > \delta$ (1)

$\lambda_{//} > \cancel{\lambda}\, \underline{\delta}$ (2)

on condition that a length of said conductive fluid is set to $l_{\perp}$ (m), and the equations of $\delta=(2/\cancel{\rho}\underline{\sigma}\ \mu\omega)^{1/2}$ and $\lambda_{//}=2\pi B/\omega(\rho\mu)^{1/2}$ are defined (σ: the electric conductivity (S/m) of said conductive fluid, ρ: the density (kg/m^3) of said conductive fluid, μ: the permeability of said conductive fluid, B: the strength of said magnetic field (T), ω: the angular frequency of said wave), thereby to generate and propagate a given vibration into said conductive fluid.

2. (Original) The propagating method as defined in claim 1, wherein said magnetic field and said wave are applied to said conductive fluid so as to satisfy the relation of:

$l_{\perp} > \lambda_{//}$ (3)

3. (Original) The propagating method as defined in claim 1, wherein said wave to be applied to said conductive fluid includes an AC electric field from an external AC power

supply.

4. (Original) The propagating method as defined in claim 1, wherein a given disturbance of magnetic field is generated due to said magnetic field to be applied and propagated in convection in said conductive fluid.

5. (Original) The propagating method as defined in claim 1, wherein an Alfven wave is generated and propagated in said conductive fluid.

6. (Currently Amended) A method for solidifying a melted metal, comprising the steps of:

preparing a melted metal,

and

applying a given magnetic field and a given wave to said melted metal so as to satisfy the relations of:

$$l_{\perp} > \delta \ (1)$$

$$\lambda_{//} > \cancel{\lambda}\underline{\delta} \quad (2)$$

on condition that a length of said melted metal is set to $l_{\perp}$ (m), and the equations of $\delta=(2/\cancel{\rho}\underline{\sigma}\mu\omega)^{1/2}$ and $\lambda_{//}=2\pi B/\omega(\rho\mu)^{1/2}$ are defined (σ: the electric conductivity (S/m) of said melted metal, ρ: the density (kg/m^3) of said melted metal, μ: the permeability of said melted metal, B: the strength of said magnetic field (T), ω: the angular frequency of said wave), thereby to generate and propagate a given vibration into said melted metal.

7. (Original) The solidifying method as defined in claim 6, wherein said magnetic

field and said wave are applied to said melted metal so as to satisfy the relation of:

$$l_{\perp} > \lambda_{/\!/} \qquad (3)$$

8. (Original) The solidifying method as defined in claim 6, wherein said wave to be applied to said melted metal includes an AC electric field from an external AC power supply.

9. (Original) The solidifying method as defined in claim 6, wherein a given disturbance of magnetic field is generated due to said magnetic field to be applied and propagated in convection in said melted metal.

10. (Original) The solidifying method as defined in claim 6, wherein an Alfven wave is generated and propagated in said melted metal.